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B1 4. (Twice Amended) The method recited in claim 3, where an integrity key (IK) is transmitted by the authentication center to the gateway.

9. (Amended) The method recited in claim 1, wherein transmitting the digital signature, accompanied by the digital certificate for the signature verification key to said service provider, further comprises:

transmitting the certificate with a request for a product or service;
receiving an invoice from a seller indicating a price for the product or service;
computing a digital signature on the invoice;
approving the invoice by transmitting the digital signature to the seller; and
accepting delivery of the product or service by a buyer.

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B1 10. (Amended) The method recited in claim 9, wherein the seller upon transmission of the digital signature, further comprises:

verifying the digital signature;
verifying that restrictions associated with the digital certificate are not violated;
and
creating an accounting record for the product or service sold.

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B1 13. (Amended) The method recited in claim 11, wherein delivering a digital certificate to the mobile station by the gateway when the identify of the mobile station and the gateway have been verified, further comprises:

requesting a digital certificate by the mobile station from the gateway sued to order and authorize a product or service from a seller.

14. (Amended) A system for ordering, authorizing and delivering goods and services using a mobile station, comprising:

a GSM authentication module to verify that the mobile station is permitted to access a telecom infrastructure;

a mobile station certificate acquisition module to request a digital certificate for the mobile station from a gateway; and

a gateway certificate generation module to verify that the mobile station is authorized to receive the digital certificate by transmitting an international mobile subscriber identifier received from the mobile station to an authentication center, calculate variables based on information received from the authentication center and compare them to variables computed by the mobile station, and issue the digital certificate to the mobile station when the variables match.

19. (Amended) A computer program embodied on a computer readable medium and executable by a computer for ordering, authorizing and delivering goods and services using a mobile station, comprising:

a GSM authentication code segment to verify that the mobile station is permitted to access a telecom infrastructure;

a mobile station certificate acquisition code segment to request a digital certificate for the mobile station from a gateway; and

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a gateway certificate generation code segment to verify that the mobile station is authorized to receive the digital certificate by transmitting an international mobile subscriber identifier received from the mobile station to an authentication center, calculate variables based on information received from the authentication center and compare them to variables computed by the mobile station, and issue the digital certificate to the mobile station when the variables match.

REMARKS

Initially, in the Office Action dated December 4, 2002, the Examiner has objected to the specification. Further, the Examiner has objected to claim 10 because of informalities. Claims 1, 3, 4 and 9 have been rejected under 35 USC §112, second paragraph.

Claims 1 and 12 have been rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,467,398 (Pierce et al.) in view of European Patent No. 0 651 533 (Diffie et al.). Claims 2 and 7 have been rejected under 35 USC §103(a) as being unpatentable over Pierce et al. and Diffie et al. and further in view of U.S. Patent No. 6,062,472 (Cheung). Claims 9 and 10 have been rejected under 35 USC §103(a) as being unpatentable over Pierce et al. and Diffie et al. and further in view of U.S. Patent No. 6,285,991 (Powar). Claims 11 and 13 have been rejected under 35 USC §103(a) as being unpatentable over Pierce et al., Diffie et al. and Powar and further in view of International Publication No. WO 99/49404 (Cochinwala et al.). Claims 14, 15, 19 and 20 have been rejected under 35 USC §103(a) as being unpatentable over Pierce et al. in view of Cheung. Claims 16 and 17 have been rejected under 35 USC §103(a) as being unpatentable over Pierce et